

EXPLANATION OF THE PLATES.

PLATE III.

- Fig. 1. *Ctenus velox*, p. 15, ♀. Abdomen, ventral area.
 2. *Ctenus velox*, ♀. Vulva.
 3. *Ctenus burtoni*, p. 25, ♂. *a.* Tibial spur of palpus. *b.* Do., lateral view. *c.* Tarsus of palpus, showing basal cusp. *d.* Tarsus and palpal organs. *e.* Palpal organs enlarged. *f.* Eyes from in front.
 4. *Ctenus carsoni*, p. 24, ♂. *a.* Eyes from in front. *b.* Tarsus of palpus from beneath.
 5. *Ctenus carsoni*. Spur of left tibia of palpus. *a.* From outside. *b.* Spur enlarged. *c.* From beneath.
 6. *Ctenus kingsleyi*, p. 21, ♀. Vulva.
 7. *Ctenus johnstoni*, p. 21, ♀. Vulva.
 8. *Ctenus occidentalis*, p. 22, ♀. Vulva.
 9. *Ctenus spenceri*, p. 23, ♀. Vulva.
 10. *Ctenus spenceri*, ♂. Tibia of palpus and base of tarsus, showing short spur.
 11. *Ctenus corniger*, p. 26, ♂. Tibia of palpus and base of tarsus, showing short spur.

PLATE IV.

- Fig. 1. *Thalassius spenceri*, p. 29, ♀. *a.* Eyes from in front. *b.* Vulva.
 2. *Thalassius unicolor*, p. 29, ♀. Vulva.
 3. *Thalassius cummingi*, p. 30, ♀. Vulva.
 4. *Thalassius jayakari*, p. 30, ♀. Vulva.
 5. *Thalassius phipsoni*, p. 31, ♀. Vulva.
 6. *Dolopæus cinctus*, p. 28, ♀. Eyes from in front.
 7. *Dolopæus cinctus*, ♀. Eyes from the side.
 8. *Thalassius spenceri*, p. 29. Eyes from the side.
 9. *Thalassius jayakari*, p. 30. Fang-groove.
 10. *Thalassius jayakari*. Tarsal claws.
 11. *Thalassius jayakari*. Protarsus and tarsus.
 12. *Ctenus marshalli*, p. 26, ♂. Palpal organs.
 13. *Ctenus marshalli*, ♂. Tibia of palpus, from above.
 14. *Thalassius jayakari*, p. 30, ♀. Spider, enlarged nearly one third.

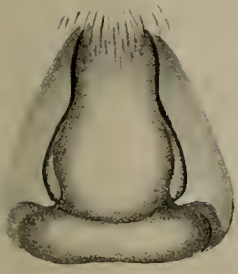
3. On some Crustaceans from the South Pacific.—Part I.
Stomatopoda. By LANCELOT ALEXANDER BORRADAILE,
 M.A., Lecturer in Natural Sciences at Selwyn College,
 Cambridge¹.

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(Plates V. & VI.)

The collections of Crustaceans treated of in this paper are those of Mr. J. S. Gardiner, of Gonville and Caius College, Cambridge, from the islands of Funafuti (Ellice group) and Rotuma, and of Dr. A. Willey, from New Britain, the Loyalty Islands, and other South Pacific localities. Both of them were made in connection with the "Balfour Memorial Fund," Dr. Willey holding the Balfour Studentship and Mr. Gardiner being also aided by a grant from the fund.

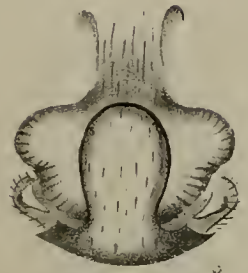
¹ Communicated by Prof. ALFRED NEWTON, F.R.S., F.Z.S.



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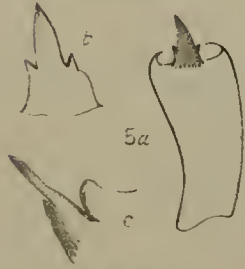
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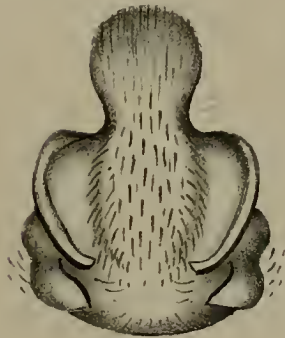
5a



4b.



3f.



6.



4a.



3e.



3d.

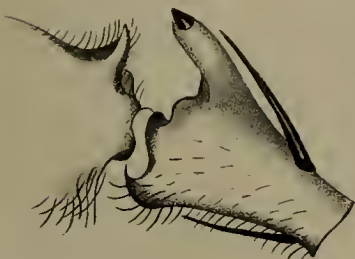


3c.



3b.

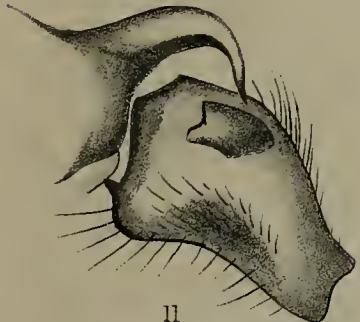
3a.



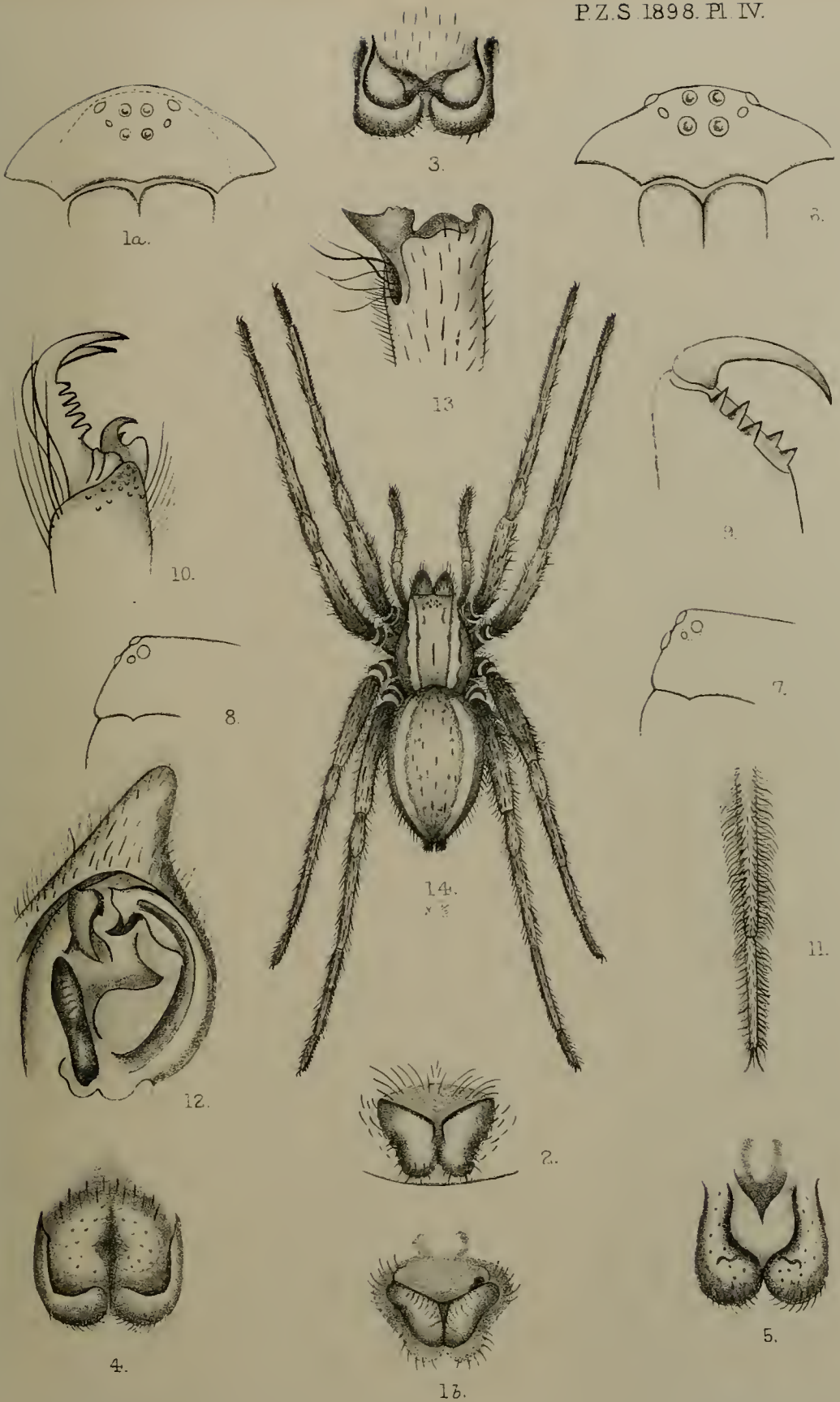
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F.O. Pickard-Cambridge, del et lith.

West, Newman imp.

African Cteniform Spiders.

In the following lists three of the species will be seen to be new.

Mr. Gardiner's collection contained examples of:—

Protosquilla cerebralis Brooks. 1 ♂ from Rotuma.

Gonodactylus chiragra (Fabr.). 8 ♂ and 8 ♀ from Rotuma :
1 ♂ and 5 ♀ from Funafuti.

Gonodactylus chiragra (Fabr.), var. *smithii* Pocock. 1 ♂ and
2 ♀ from Rotuma.

Gonodactylus glabræus Brooks. 1 ♀ from Rotuma.

Gonodactylus espinosus, sp. n. 1 ♂ from Rotuma.

Odontodactylus scyllarus (Linn.). 2 ♂ and 2 ♀ from Rotuma.

Pseudosquilla ciliata (Fabr.). 1 ♀ from Funafuti.

Pseudosquilla oxyrhyncha, sp. n. 1 ♂ from Rotuma.

Lysiosquilla maculata (Fabr.). 1 ♂ and 1 ♀ from Rotuma.

Dr. Willey's collection comprised specimens of:—

Protosquilla cerebralis Brooks. 2 ♀ from Sandal Bay, Lifu,
Loyalty Islands; 1 ♂ from Pigeon Island, New Britain.

Protosquilla trispinosa (Dana). 1 ♀ from Lifu, Loyalty
Islands.

Gonodactylus chiragra (Fabr.). 2 ♂ and 5 ♀ from Lifu,
Loyalty Islands; 1 ♂ and 1 ♀ from the Isle of Pines;
1 ♂ and 1 ♀ from Talili Bay; 1 ♀ from Ralu; 1 ♂,
locality not stated.

Gonodactylus chiragra (Fabr.), var. *smithii* Pocock. 1 ♂ and
2 ♀ from Lifu, Loyalty Islands.

Odontodactylus scyllarus (Linn.). 1 ♀ from New Britain.

Squilla multituberculata, sp. n. 1 ♂ and 2 ♀ from Sandal Bay,
Lifu, Loyalty Islands.

Pseudosquilla ciliata (Fabr.). 1 ♀ from Uvea, Loyalty Islands;
1 ♂ from Blanche Bay, Loyalty Islands.

I now proceed to general remarks on the above-mentioned species.

1. PROTOSQUILLA CEREBRALIS Brooks. (Plate V. fig. 6 a.)

Protosquilla cerebralis, Brooks, 'Challenger' Stomatopoda, p. 72,
pl. xiv. figs. 2 and 3, pl. xvi. figs. 2 and 3 (1886).

Brooks's examples of this species were all females. Fortunately, however, Mr. Gardiner's and Dr. Willey's collections each contain a male specimen, so that I have been able to have a figure made of the peculiar structure on the endopodite of the 1st abdominal appendage in this sex (fig. 6 a, Plate V.). The importance, from a systematic point of view, of a record of the form of this organ in each species has been pointed out by Brooks (*loc. cit.* p. 13).

1 ♂ from Rotuma; 2 ♀ from Sandal Bay, Lifu, Loyalty Islands;
1 ♂ from Pigeon Island, New Britain.

2. *PROTOSQUILLA TRISPINOSA* (Dana). (Plate V. figs. 1, 1 a.)

Gonodactylus trispinosus, Dana, Zool. U.S. Expl. Exped., Crust. i. p. 623 (1852); Miers, Ann. Mag. Nat. Hist. 5, v. p. 121, pl. iii. fig. 10 (1880).

Protosquilla trispinosa, Brooks, 'Challenger' Stomatopoda, p. 71 (1886).

The naming of this species is generally credited to White (List Crust. Brit. Mus. p. 75, 1847), but, as White published merely the name and a reference to a plate (in the "Zoology of the Voyage of the 'Erebus' and 'Terror'") which never appeared, the true author is Dana, who was the first to describe it.

No complete figure of *P. trispinosa* has ever been published, and as the representation of the telson given by Miers does not accurately depict either White's original specimen in the British Museum or that in Dr. Willey's collection, which themselves agree closely, I have determined to append a figure to the present note.

All descriptions of this species hitherto published have overlooked the fact that the three tubercles of the telson are not smooth, but covered with minute spinules. An amended definition of the species will run as follows:—

"A *Protosquilla* with the two antero-lateral spines of the rostrum nearly as long as the median; carapace with corners nearly rectangular, anterior more acute than posterior; fifth abdominal segment longitudinally corrugated; sixth abdominal segment clearly marked off from the telson, and bearing six smooth tubercles; telson bearing a median and two lateral large tubercles covered with minute spinules, the median anterior to the two laterals; posterior border of telson divided by deep narrow fissures into six lobes; submedian, intermediate, and lateral spines of the telson small and placed in notches; several submedian spinules." Length about 40 mm. 1 ♀ specimen from Lifu, Loyalty Islands.

3. *GONODACTYLUS CHIRAGRA* (Fabr.). (Plates V. fig. 4, & VI. fig. 8.)

Squilla chiragra, Fabricius, Ent. Syst. t. iii. pt. i. p. 513 (1793).

Gonodactylus chiragra, Latreille, Encycl. Méth. x. p. 473 (1825); Dana, Zool. U.S. Expl. Exped., Crust. i. p. 623, pl. xli. figs. 5 a, b (1852); Miers, Ann. Mag. Nat. Hist. 5, v. p. 118 (1880); Brooks, 'Challenger' Stomatopoda, p. 56, pl. xv. fig. 4 (1886).

Gonodactylus smithii, Pocock, Ann. Mag. Nat. Hist. 6, xi. p. 475, pl. xx. B. fig. 1 (1893).

Pocock has described, under the name of *Gonodactylus smithii* (Plate V. figs. 2, 2 a, b), a form differing from the type as follows:—

- (i.) The crests upon the sixth abdominal segment and telson are much more compressed and carinate than in *chiragra*.
- (ii.) The crests upon the sixth abdominal segment are produced, without constriction, into long spines.